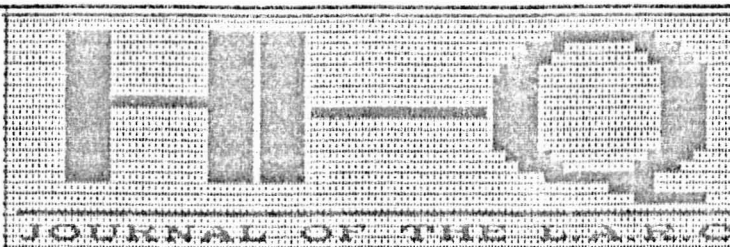


FEBRUARY 1990

AMATEUR RADIO IN THUNDER BAY - ONTARIO

EDITED BY E.R.  
BAUMANN VE3SNH  
SUBMISSIONS AND  
COMPLAINTS  
736 S. NORAH ST.,  
THUNDER BAY, ONTARIO,  
CANADA  
P7E 1P7  
(807) 622-1216



NEXT MEETING IS THURSDAY  
MARCH 8, 1990

CONFEDERATION COLLEGE  
MCINTYRE BLDG

EVERYONE WELCOME!



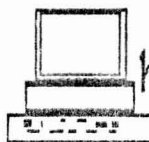
## satellite world....pat ve3hfs

It's not crowded, propagation is predictable, and reception is pretty good, providing the satellite attitude is favourable. Oscar10, 13 and RS10/11 are the active satellites right now. AO10 and 13 have elliptical orbits with the satellite in view and workable up to 10 hours. At perigee the satellite will be within 5000 km., at apogee it will range as high as 42000 km. Primary operating mode is Mode B, 435 Mhz up and 145 Mhz down. RS 10/11 is in a circular orbit approximately 1000 km high, and is in view for 18 minutes each pass. Surprisingly it can be fairly busy since the primary mode is two meters up and ten meters down. As long as you have an "all mode" Two Meter rig and an HF rig you are in business! With the 18 minute pass and doppler shift to contend with, you can have a fun time. I don't work RS10/11 often, I prefer the longer range communications of AO10 and 13.

What's active on the birds now? How about OE5THL, G8OPR, PA0JOP, N8AM, VK3DLM for the more mundane contacts. For the more exotic regions how about OX3DB, 9M2ZZ, 4X1MK (ex VE3GAG). Imagine having a 15 minute chat with 9M2ZZ, Kevin, on the HF bands, anarchy would take place. While some people chase DX, most are looking for the longer contact. Outside of the U.S., I think the West Germans are the most active. When the satellite is open to Europe or Japan the CW portion of the band can be busy. Have you ever tried to send CW with an echo? (you can hear yourself being retransmitted).

The big news is the launching of the Microsats on January 22, 1990 with the UoSat-D and E along with Microsats PACSAT, LUSAT, WEBERSAT and DOVE being put into orbit. PACSAT and LUSAT are orbiting packet mail boxes. They will not function as digipeaters. Access will be via a packet radio TNC and associated computer terminal, two meter fm radio for transmit and a 435-438 Mhz sideband receiver connected to a phase shift keying demodulator for reception. Since they are in low circular polar orbit (approximately 800 km. high) fancy antennas are not supposed to be required. Omni verticals or J poles should be sufficient. Beacon frequencies are said to be as follows: PACSAT-437.050 Mhz, DOVE-145.825, WEBERSAT-437.075 or 437.100 (nobody is quite sure), LUSAT-437.150 and a CW beacon on 437.125. They are expected to be operational in the next two or three weeks ( I am writting this on Jan.22nd.)

73's VE3HFS



## hf packet....steve ve3krh

Conversation, data forwarding, both are possible and useful in the world of packet communications. My personal preference is keyboard to keyboard conversation. There are well over 100 countries represented by packet radio on the HF frequencies. Yes DXCC is possible using FIDBN (mode for logging purposes). My first try at HF packet was September 7, 1987 with WB7AJP on 20 meters. The QSO lasted all of 18 minutes. What does one talk about? Well, after the usual preamble, if conditions are good, you can ramble on for as long as the path holds. The longest QSO I've had on HF FIDBN was just under 2 hours with Burt VE1AMA in Summerside P.E.I. It turned out we both knew a couple of our travelling hams (VE3OTC to name one).

Some of the other calls I have logged are: YV6BTM, SK7SSA (call has since been changed to ??), DA1NP, I1HJP, 6Y5EE, and HI8EL. Many other repeats and of course and few hundred U.S. contacts and SEVERAL VE's to add to the never ending list of enjoyment.

FIDBN is growing quite fast on HF and the channel system is being used (i.e. 14.101, 14.103, 14.105 etc.). Each frequency can support more than one QSO at a time and is not limited to the 20m meter band.

73's Steve VE3KRH

## SIBLEY SKI TOUR VOLUNTEERS NEEDED

The Sibley Ski Tour is slated for Saturday, March 3rd at Sibley Provincial Park, now called Sleeping Giant Provincial Park. A total of 7 or 8 operators are required for this event and anyone interested is asked to contact Skip VE3BBS either on 2 meters (YQT), 3.750 KHz (Northwest ARES net) or phone 767-2307 if you are interested. We have been supporting this event with communications for the last 15 years. Breakfast call will be at the Petro-Can restaurant at the Pass Lake turn off at 8630, March 3rd.

VE3BBS

## UPCOMING EVENTS !!

March 3 - Sibley Ski Tour - volunteers needed - call Skip today ! - breakfast meet at PetroCan at Pass Lake at 0630 hours.  
 March 8 - 1930 hours Regular club meeting, Confederation College  
 March 9 - JEEP 500 Volunteer Bash- 1900 hours- Old Fort William  
 Every Saturday morning - breakfast meet at Blue Parrot at about 1800 hours.

## JEEP 500 VOLUNTEER BASH !!!

Bruce Andrews, Canadian Race organizer, has advised that a social is being planned for all the volunteers who worked with this years JEEP 500. Although not cast in stone at this time, it's planned for FRIDAY--MARCH 3rd, at 1900 hours at OLD FORT WILLIAM. Make sure you keep your JEEP 500 blue ID cards. This is the only way you can get admitted to this windup. If anything further develops I will get in touch with everybody. JEEP 500 hats will be presented that evening and Bruce has got another 12 hats, so everyone that worked the race will end up with one. Skip..VE3BBS

## SWAP 'N' SHOP

Monday evenings on the Northwestern Ontario Amateur Radio Emergency Service Net will be SWAP 'N' SHOP night, after the normal net which is run on 3.750 Khz. All are invited to check in with gear to sell, trade etc. Anybody requiring amateur gear in town should get in touch with Skip VE3BBS either at home (767-2307) or on two meters (YQT). Skip...VE3BBS

SPACE FOR  
RENT

## JEEP 500 INTERNATIONAL SNOWMOBILE RACE

Another JEEP 500, the 5th annual, has come and gone. All things considered, the communications provided by the LARC was the best ever for this event. A total of 25 persons took part in this years event and all are commended for the exceptional job performed. For those who didn't take part, here is a run down of the operation. Net control (VE3FW) was run from OLD FORT WILLIAM, and this year the control station had their own operating area, away from the pit crews and onlookers. This proved to be a great asset to those working net control. Control operator was Bill VE3AJ, with VE3JQ, VE3NPS, VE3TRE, and VE3KRH. Also helping out was Jon Garnett, a student at SWC, who really got an idea of how a public service event is controlled. Check point 3 was manned by VE3AXL and son, check point 4 was run by VE3AVS and another student, Fred Lesnick. The fuel stop was manned by VE3XRC, VE3OPF, VE3SNW and VE3WCT. Working at checkpoint 6 was VE3JAJ, check point 7 was VE3ZG and family, with 8 being handled by VE3JSC. Checkpoint 9 was the Canada/US border and was handled by VE3JAU and VE3EBL. Operators on the US side of the border were VE3ILV and son, with VE3LMV working Devils Track Lake and VE3BBS with WB0HRO handled the finish line at Grand Marais. Working 40 meter HF in town was VE3JAB. VE3BCD and VE3NHX stood by in the event of repeater malfunction. This year saw two new communication systems used. Through the efforts of Laurie VE3BCD, and the co-operation of WB0HRO and N0DZZ the Grand Marais repeater was UHF linked to VE3YQT which provided two meter coverage from Thunder Bay to Grand Marais. This worked very well, and has sparked interest to the pursue the linking as a permanent feature. Packet communications were used for the first time and worked exceptionally well. Both the Canadian fuel stop and the border check points were handled by this mode. At the fuel stop, numbers of racers leaving the area were relayed simplex to VE3SNW and VE3WCT working a packet station about 2 miles away, who then sent the packets to VE3FW and the Old Fort. The border check point used the home station of VE3WCT to digi to the Old Fort. All in all, both the link and packet provided coverage for the race that was second to none and impressed the race organizers immensely.

For those operators and students that took part in the exercise, you can be proud of your accomplishment. A total of 217 racers started, 189 made it to the border and 154 finished at Grand Marais. Every racer's number from the start to the finish line were recorded and handled back to the control station.

In closing, I would like to say the one thing that impressed me the most was the 'smarts' of the operators involved. When you experienced a problem either with the link, HF, or packet, an alternative plan was immediately put into action. When it came right down to it, the job had to be done and you did it. MANY THANKS !!!!!

Lakehead Amateur Radio Club History Project

SKIP VE3BBS

"7.055.0" ..Norm VE3XRC  
 What frequency on 40 meters operates up to 10 hours a day as a net frequency?  
 What frequency on 40 meters host a Provincial Net as well as a cross Canada Net?  
 If you said "7.055.0" you were right on both counts. The Trans-Provincial Net meets Monday to Friday from 8 a.m. to 5 p.m. and Saturday and Sunday from 8 a.m. to 4 p.m. A swap shop is run Saturday mornings from 10 to noon, hosted by VE3AJB (Al in Little Current) and VE3TUR (Paul in Wainfleet). Usually conditions are quite good into Thunder Bay for the TransProvincial Net. If you require a contact anywhere in Ontario the TP net is the place to go. The net manager is VE3EWI, Denny in Sault Ste. Marie. As well as the TP Net, 7.055.0 is used twice in the evenings, 6:30 p.m. and 9:30 p.m. for the AURORA NET usually hosted by a VE4 or VE5 station. On a good night, stations from Toronto to Vancouver can be heard checking in. This net is a great pipeline in the Winnipeg area and a good way to check the weather for the next few days. Seven days a week, 5 days a year, 7.055.0 is active for the best part of the day. If you want to go east, west, or southeast, 7.055.0 is the place to be!

Greeting and salutations (from Good Morning Vietnam). I hope you are sticking to your New Years resolutions, I seem to be making some progress at my end. My resolution was to see various LARC projects through and slowly but surely we're getting there.

Skip VE3BBS did a wonderful job of organizing the JEEP 500. It was quite an exercise this year, and with YQT funding on the go, it was in our best interest to put on a good show. The YQT funding package has been completed and is presently under consideration by a major corporation for partial funding. The package is very impressive and a big **THANKS** must go out again to the originators who must have spent a lot a time and effort putting it together. They can rest knowing that their efforts have not gone by the wayside.

My apologies to those that had attended the January meeting. My communication skills leave a lot to be desired when I find myself in front of a group, and I wish I could have given a better presentation of the Digicom 64 TNC. I tried!

If you use the club repeaters, you may have noticed some changes. TBR has a new receiver, and it is working great. Erik EBL talked into it from Mt. Josephine, but was unable to hear it. Lindo NHX and myself will tackle the project again after the JEEP500. Next step is a new transmitter. YQT now has a new transmitter, thanks to Lindo. The old one was getting too unreliable, and the JEEP500 was getting close. Output must be improved because it doesn't even picket fence through Kakabeka anymore.

Lately, it has been quite encouraging to see all the renewed enthusiasm with the LARC. Many new projects are in the works and some have already gotten a good start. For example, Laurie BCD has proven we can link YQT to Grand Marais, and the link during the JEEP500 worked great and was an invaluable tool. Perhaps it was also our foot in the door for a permanent link that would eventually run through to the twin cities. Imagine ...linking back to Thunder Bay while shopping in Duluth...something to think about.

At this time I would like to thank all those taking an active role within the LARC. It is reassuring to see all the co-operation amongst the members. I cannot stress how much it pleases me to see the renewed interest in the club. Please excuse me if I missed anything as there are a lot of projects to keep track of, and it's easy to miss something in the shuffle. Oh yes, thanks to Ed SNW for the great job he is doing on the HI-Q (I made him say that...ed)

73 de GLENN VE3JAU

475-3516

### GLEANINGS from the Nets....by N<sup>2</sup>

In a netshell, the prime purpose of a net is to communicate and handle traffic, priorities being observed, emergency, formal, routine, informal, either on phone or CW.

Some nets are very formal, having a set routine and priorities, in the format of reporting into the net, and a net controller to keep order and direct the members of the net. These nets are set up on a specific frequency and time for members and other hams to check in, all under the direction of the net controller. Other nets are informal, more like a party line with the net controller allowing a chatty type of communication. Usually after having established a contact on a net, persons wishing to pass messages or QSO with others on the net QSY to a mutually agreed frequency.

Here's a small sample of the nets easily heard in Ontario:

Northwestern Ontario Anes Net...daily...lsb...3.750 Mhz...0115 z  
Comsont.....daily...lsb...7.074 Mhz...1500 z  
TransProvincial.....daily...lsb...7.055 Mhz...1300 z - 2200 z  
TransCanada Phone.....Sat/Sun/Hol...usb...14.140Mhz...1700 z  
PowWow Club(TransCanada.....daily...lsb...3.750 Mhz...0500 z  
TransCanada.....Sun/Hol...usb...28.240Mhz...1730 z  
Swap Shop (Ontario).....Sun...lsb...3.755 Mhz...0100 z

These are just a few on the numerous nets. Every province, state, club, provides nets for members to communicate in every mode (CW, phone, RTTY, packet, Antor, satellite, smoke) from coast to coast, not to mention north, south, east and west and worldwide. Listen in, snoop, make contacts, ragchew, but most of all -- **COMMUNICATE.**

#### GLEANED FROM THE NETS:

Feb.14 - 7.055 Mhz - 1300 Z to 2200 Z - special Valentines Day Net, run by 8 YL's or XYL's throughout the day.

Feb.24 and 25 - Girlguides of the World Air Jamboree, all frequencies, contacts by and to them would be greatly appreciated, get an official QSL from the Girl Guide Association.

March 18 - 7.055 Mhz - Scouts and Girl Guides of Ontario mini jamboree, listen, snoop, contact and communicate, make comments short and in good taste, BE A GENTLEPERSON ON AND OFF THE AIR.

73's - Nestor VE3NPS and Norm VE3XRC



## A RESPONSE TO TOM'S LETTER LAST MONTH...

ED

Just a short note on the last HI-Q. I'm not sure the article by Tom should have been printed in its entirety. My knowledge of Packet is very limited (nil) and probably Tom's suggestion to use another frequency is a good and valid one. However, I don't like to air our dirty laundry in public. I think some of that article could have been edited out and still been effective in urging beaconing on another frequency. HI-Q does go to other radio clubs and groups. Say if someone from the Jeep 588 saw the article. I suspect they would wonder about our professionalism.

I would like to see some articles in the future about simple packet for us who would like to get involved but are not sure how. Thanks.

Anyway you are doing a great job and as you must by now realize what seems to be a no win one. Thank you for a great magazine.

(signed) Bill Unger

VE3EFC

*Thanks for your kind comments Bill. As for printing the whole letter, I promised Tom I would print the whole thing before he wrote it and I was duty bound to do so. While I may not agree with his philosophy, I realized that we were soon to experience the same problem as the use of packet blooms in this area. If his letter is the catalyst that urges packet users to co-operate and agree to some sort of band plan perhaps that will outweigh the negative aspects of his letter. As for getting into packet, I see you have borrowed Skips equipment and are getting your feet wet...see you on the tube! Regarding packet articles...anybody want the job, I just edit this rag....thanks again Bill...ed*

Writing your will? Don't forget your valuable ham equipment! If you don't want to leave it to me or your favourite relative, consider the club or a school.

## pHL's dictionary

**BACKWARD WAVE:** in a travelling wave tube, a wave having a group velocity opposite the direction of electron stream motion.

**BACK PORCH EFFECT:** The continuation of collector current in a transistor for a short time after the input signal has dropped to zero. The effect is due to the storage of minority carriers in the base regions. It also occurs in junction diodes.

**BETA CUTOFF FREQUENCY:** The frequency at which the beta of a transistor is 3 db below the low frequency value.

**BETATRON:** A large doughnut shaped accelerator which produces artificial beta radiation. Electrons (beta particles) are whirled through a changing magnetic field. They gain speed with each trip and emerge with high energies (on the order of 180 million electron volts)

**BETA PARTICLES:** A small electrically charged particle thrown off by many radioactive materials. It is identical to the electron and possesses the smallest negative electron charge found in nature. Beta particles emerge from radioactive material at high speeds, sometimes close to the speed of light.

73's

John VE3PHL

**SPECIAL NOTE:** JOHN'S NEWS FROM JAPAN WILL RETURN NEXT MONTH, UNFORTUNATELY WE HAVE RUN OUT OF ROOM THIS MONTH. IN THE MEANTIME STUDY THESE DEFINITIONS - THERE WILL BE A TEST...ED

## MORE ON THE PACKET ISSUE...

The following item is from the February newsletter of the COPPER COUNTRY AMATEUR RADIO ASSOCIATION. It seems they have taken a strong stand on the use of 145.81 packet transmissions; we need to do the same, in the true spirit of cooperation...

**PACKET COMMITTEE REPORT:** "The packet committee would like to encourage packet users to think twice before sending out automatic beacons. the only legal uses for packet beacons on 145.81 Mhz are to send information of general interest to the ham community (news) and to solicit two way communications (call cq). Beacons to help monitor changes in propagation are not allowed on 145.81 Mhz. Many of the beacons now being sent are "old news" where the information is often duplicated with the automatic ID and are probably not very effective at generating new two way contacts. In addition in the the Copper Country where not all packet stations can hear one another, the beacons can slow throughput and can become a nuisance. One other recommendation by the committee: the committee recommends a DWAIT setting equivalent to 200 milliseconds (see your operators manual for the number to input, that is the equivalent gto 200 milliseconds). On some TNC's this will be a DWAIT of 20, on others it will be some other number."

73's

Dave

VE3AVS/SHC